

**SUMTER COUNTY BOARD OF COMMISSIONERS
EXECUTIVE SUMMARY**

SUBJECT: **Presentation on Status of FEMA Flood Map Modernization Project for Sumter County.**

REQUESTED ACTION: Information Only.

☒ Work Session (Report Only)

DATE OF MEETING: 9/20/11

☐ Regular Meeting

☐ Special Meeting

CONTRACT: ☒ N/A

Vendor/Entity: _____

Effective Date: _____

Termination Date: _____

Managing Division / Dept: _____

Planning

BUDGET IMPACT: _____

☐ Annual

FUNDING SOURCE: _____

☐ Capital

EXPENDITURE ACCOUNT: _____

☒ N/A

The Federal Emergency Management Agency (FEMA), in cooperation with the Southwest Florida Water Management District (SWFWMD), is in the process of updating the National Flood Insurance Rate Maps (FIRM) that cover Sumter County. The process is known as “map modernization”. The FIRMs are the maps used to delineate the flooding risks of property. The FIRMs have regulatory standing related to development within or impacts to special flood hazard areas (100-year floodplain).

Staff with SWFWMD has been working with a stakeholder group of Sumter County citizens through this process. The stakeholder group is comprised of representatives of the real estate industry, insurance industry, banking industry, engineering industry, agriculture industry, business representatives (Chamber of Commerce), The Villages, and city representatives.

The draft new FIRM maps are scheduled to be released in the next 30-60 days. The attached presentation provides the Board with an update regarding the process, impacts, and remaining tasks.

Sumter County and Incorporated Areas Flood Map Modernization

Sumter County – BOCC Workshop
September 20, 2011



Agenda

- Welcome
- Introductions
- Sumter County Flood Map Modernization Project
 - Overview of Flood Maps and Project Scope
 - Examples of Changes
 - Magnitude of Changes and Remaining Timeline
 - What to Expect from Constituents
 - Building, Insurance, and Outreach Overview
- Questions/Open Discussions



Project Team Introductions

Community:

- Sumter County
- City of Bushnell
- City of Center Hill
- City of Coleman
- City of Webster
- City of Wildwood

Unincorporated Areas:

- The Villages
- Continental Country Club

*Stakeholder Group
(Outreach)*

Agency:

- Southwest Florida Water Management District (SWFWMD)
- Federal Emergency Management Agency (FEMA)

Agency's Consultants:

- FEMA:
 - Professional and Technical Services Contractor (Michael Baker, Jr., Inc.)
- SWFWMD:
 - Dewberry
 - Bender Consulting



Sumter County Flood Map Modernization Project



Digital Flood Insurance Rate Maps

- Foundation of a community's floodplain management program
- Delineates the 1% and 0.2% annual chance floods (100- and 500-year floods, respectively)
- *Depicts floodways* (not applicable for currently studied areas)
- Provides Base Flood Elevations where applicable
- Publishing and distributing Flood Insurance Rate Maps (FIRMs) and Flood Insurance Study (FIS) reports
- Used by the NFIP for flood insurance purposes



Why Sumter is Modernizing Maps

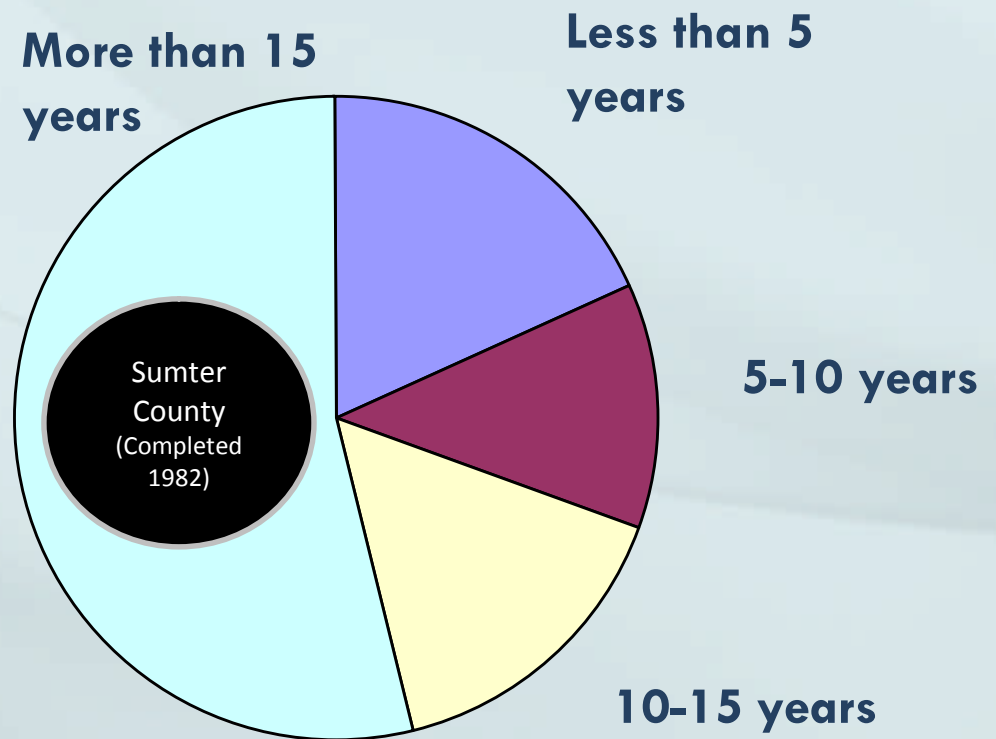
Flood Insurance Rate Map (FIRM) Modernization Project

- Modernize = Digital Maps & Support Data
- Reduce Time & Costs For Future Updates
- Develop Partnerships
 - Maximize resources
 - Transfer ownership
- **Communicate Risk**



Status *Before* Map Modernization

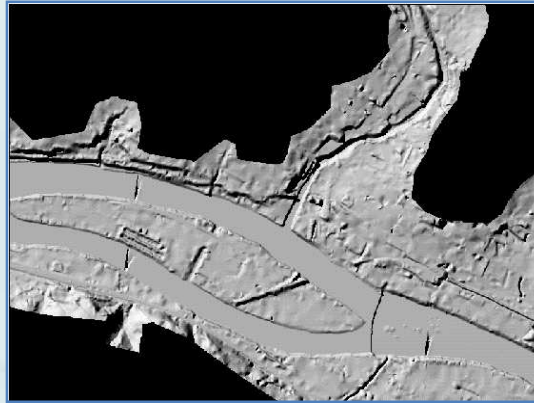
- Approximately 20,000 mapped communities in U.S.
- Approximately 70% of maps >10 years old
 - Outdated Maps*
 - Unidentified floodplains*
 - Unregulated floodplains*
 - Building and development in floodplains*
 - People and property at risk of flood devastation.*



Components of a Digital FIRM



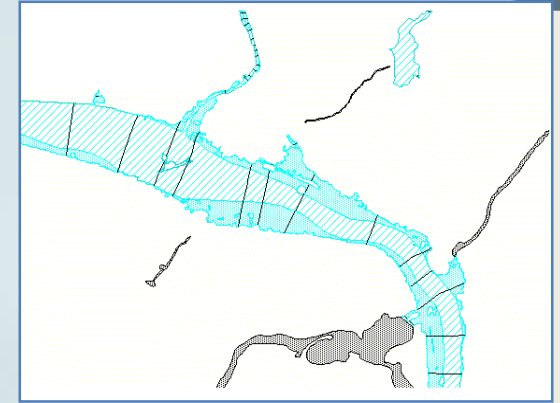
Base



+

Topography

+



Flood Data

=

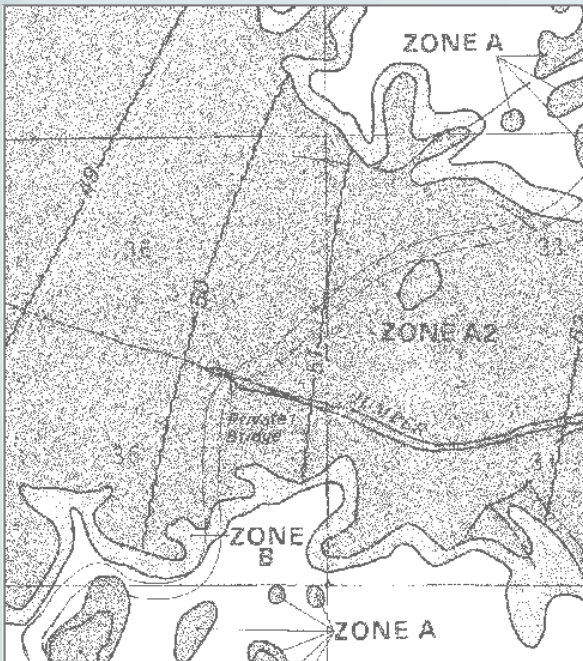


DFIRM

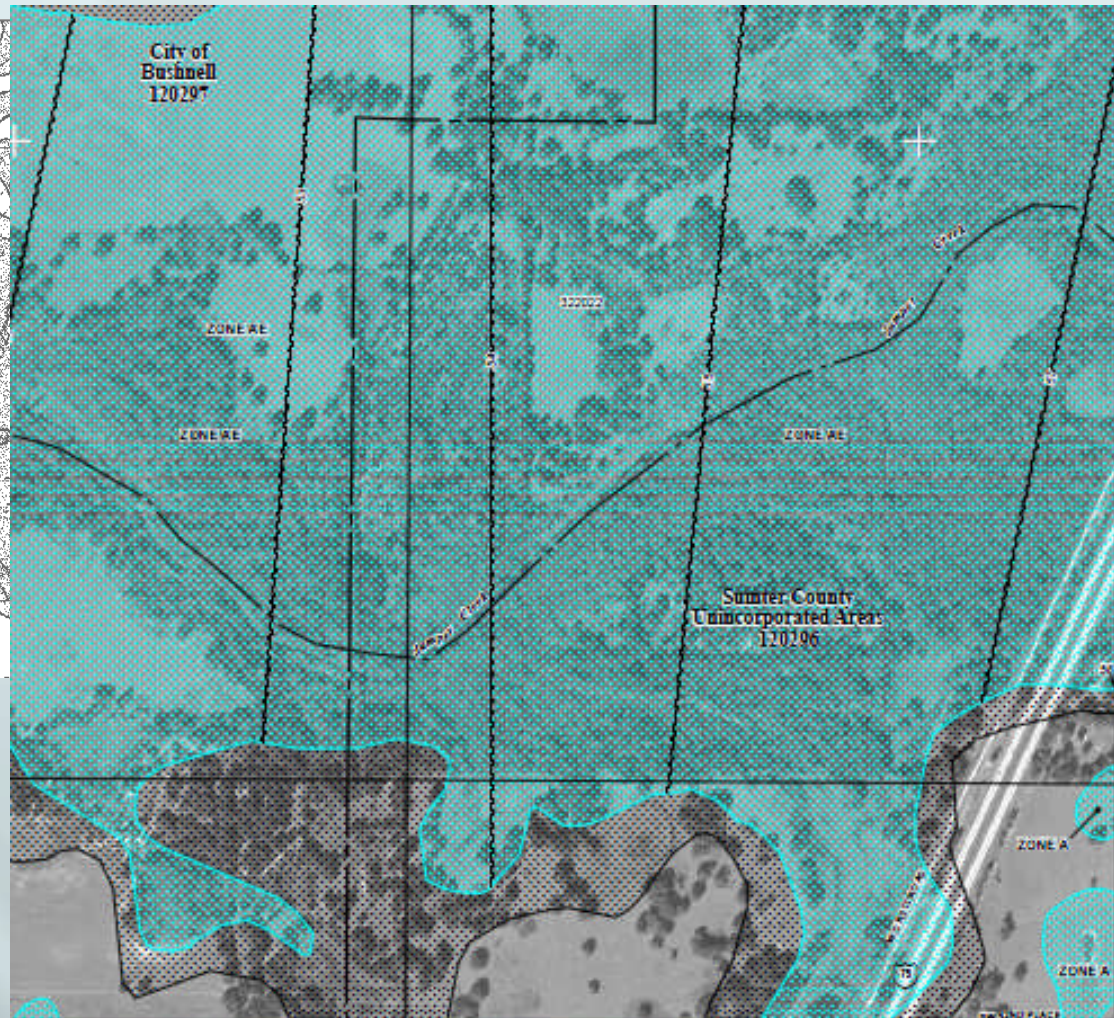


Sample Digital FIRM

Digital Base Map (New)



Vector Base Map (Old)



General Scope for Sumter Mapping

- Digitize information from effective FIRM (“Digital Conversion”) fitted to 2009 orthophoto base map
- Incorporate “known” wet areas (review of wetland areas, previously unmapped open water areas, aerial imagery of previous flood impacts)
- Incorporate approved hydraulic and hydrologic models
 - The Villages (models and Letter Of Map Revision support data)
 - Letter of Map Revisions



Scoping Meeting - Consensus Items

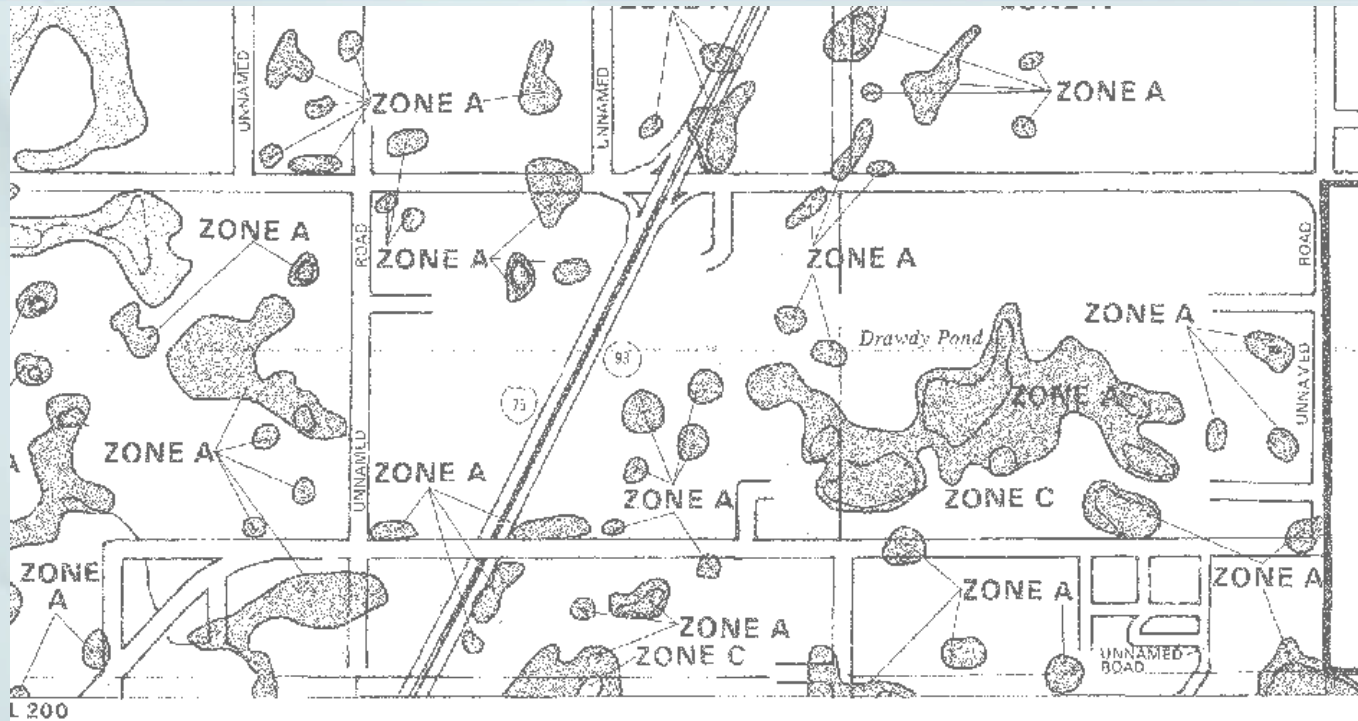
- **Panel layout** – Suggested layout based on effective information (1:500 [147 panels] and 1:1000 [8 panels]) *Agreed upon*
- **Conversion factor** – Is the recommendation for 1 factor? *No, final recommendation is to use datum conversion established for each watershed*
- **Ortho vs Vector Base Map** – Ortho photo base *Yes*
- **FIRM collar/Index changes** – Different than current effective style. Any other information to be added/revised *District specifications applied*
- **Historical Delineations** – Everyone understand what will be done? *Yes*
- **Redelineation of Effective Flood Hazards** – Everyone understand what redelineation work will be done? *Only performed for new models incorporated with Villages. Pilot performed in Jumper Creek and results presented to SWFWMD, FEMA, and County. Parties agreed to perform uplift and not re-delineate due to age/accuracy of original models*
- **Review of Data Collection** – Please contact Dewberry or SWFWMD staff if there are other sources of topo, base map, flood studies than what was discussed today *Provided by contacts*
- **Levees and Dams** – Verify existence/non existence *Done*



Examples of Map Changes



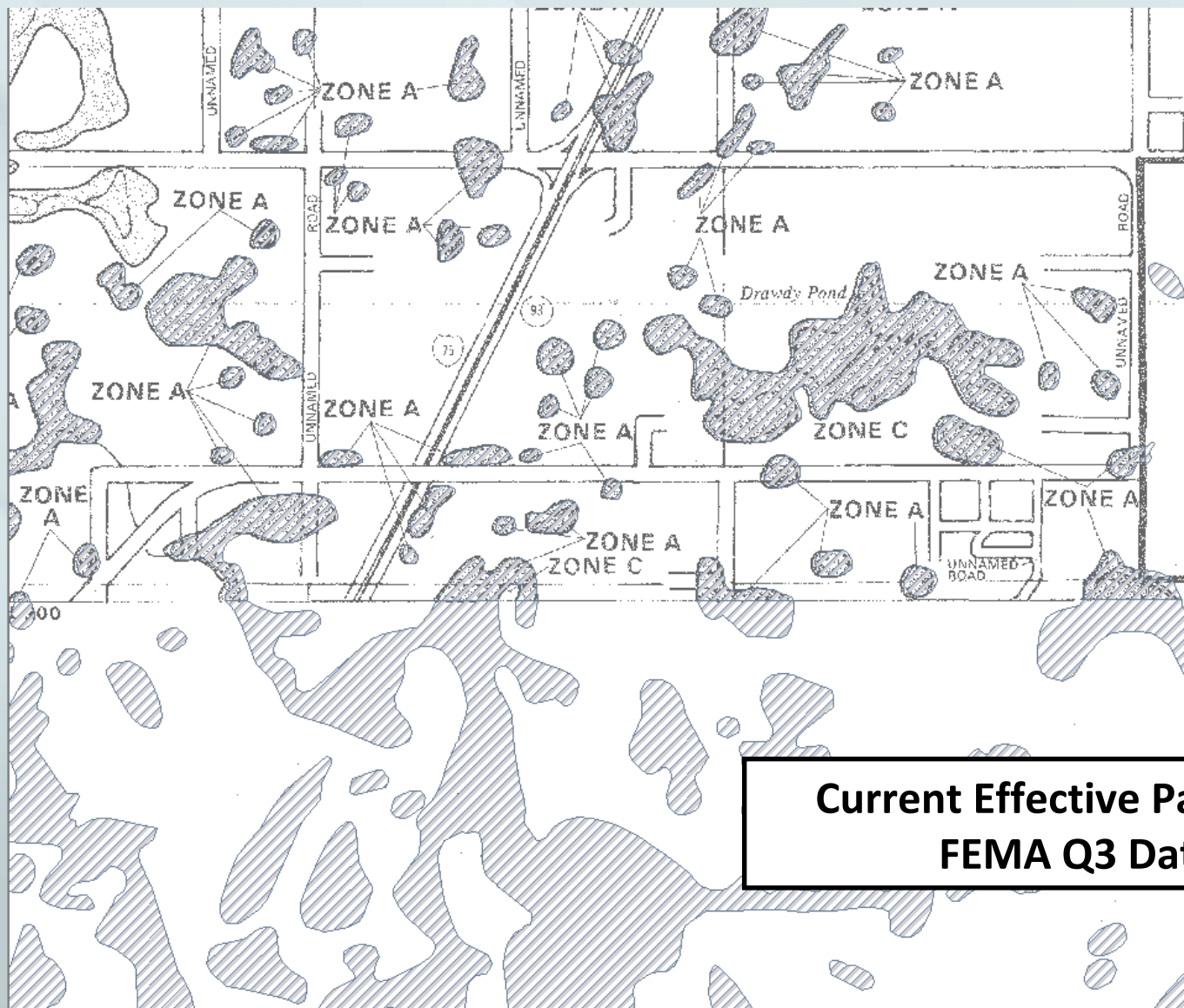
Sample Digital FIRM - Update Overview



Current Effective Panel



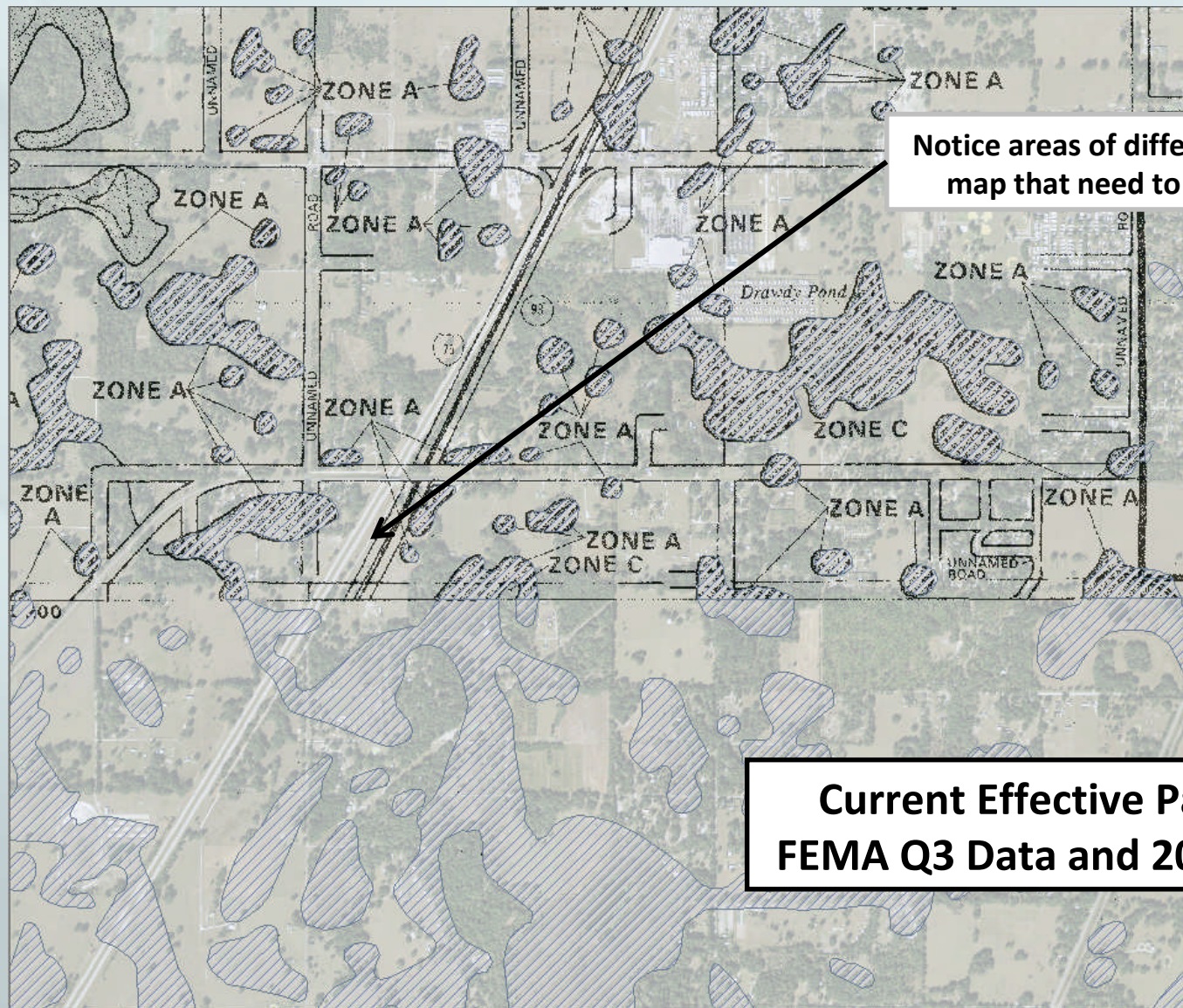
Sample Digital FIRM - Update Overview



**Current Effective Panel and
FEMA Q3 Data**



Sample Digital FIRM - Update Overview

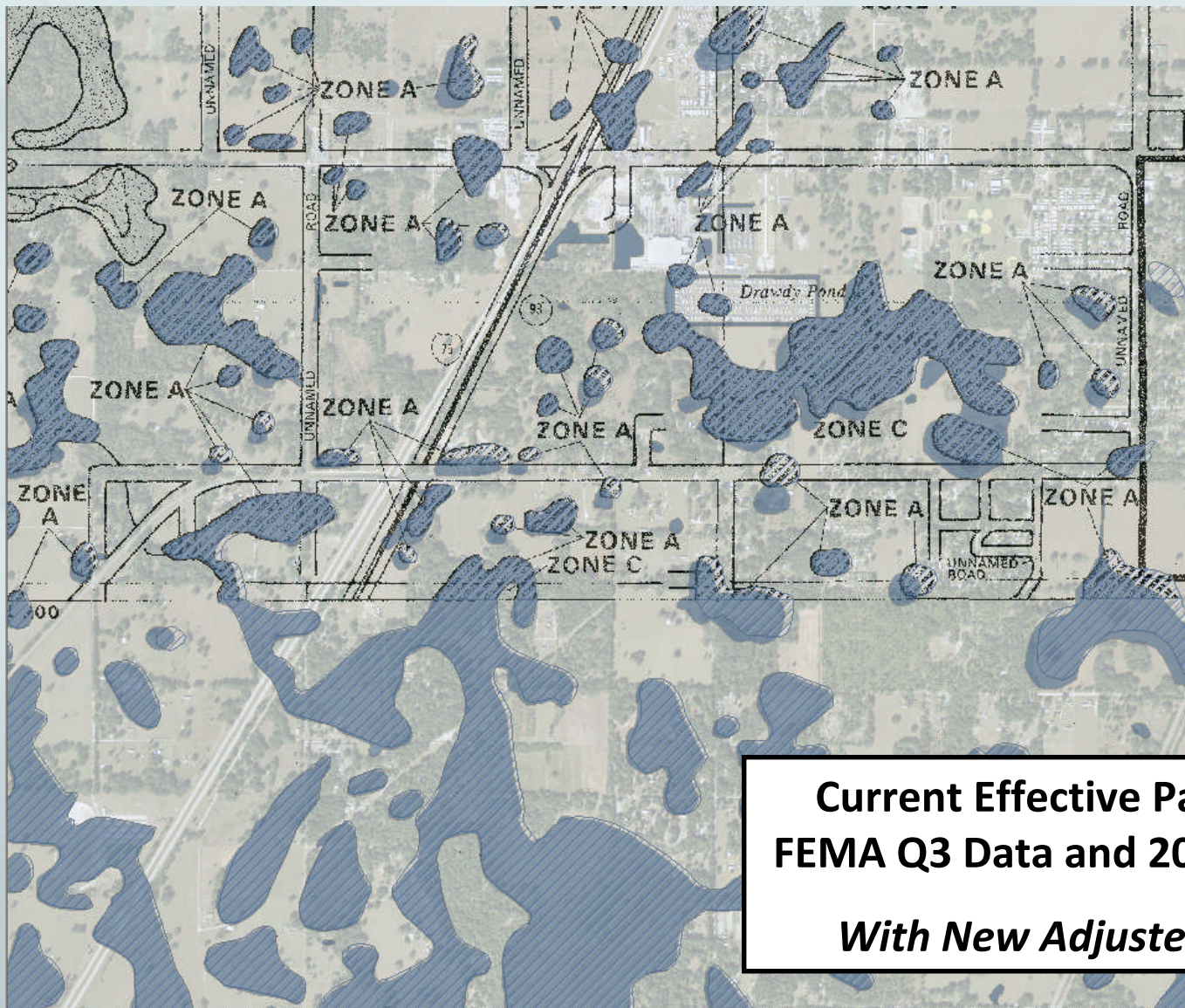


Notice areas of difference between old vector map that need to be fit to new base map

Current Effective Panel and
FEMA Q3 Data and 2009 Aerials



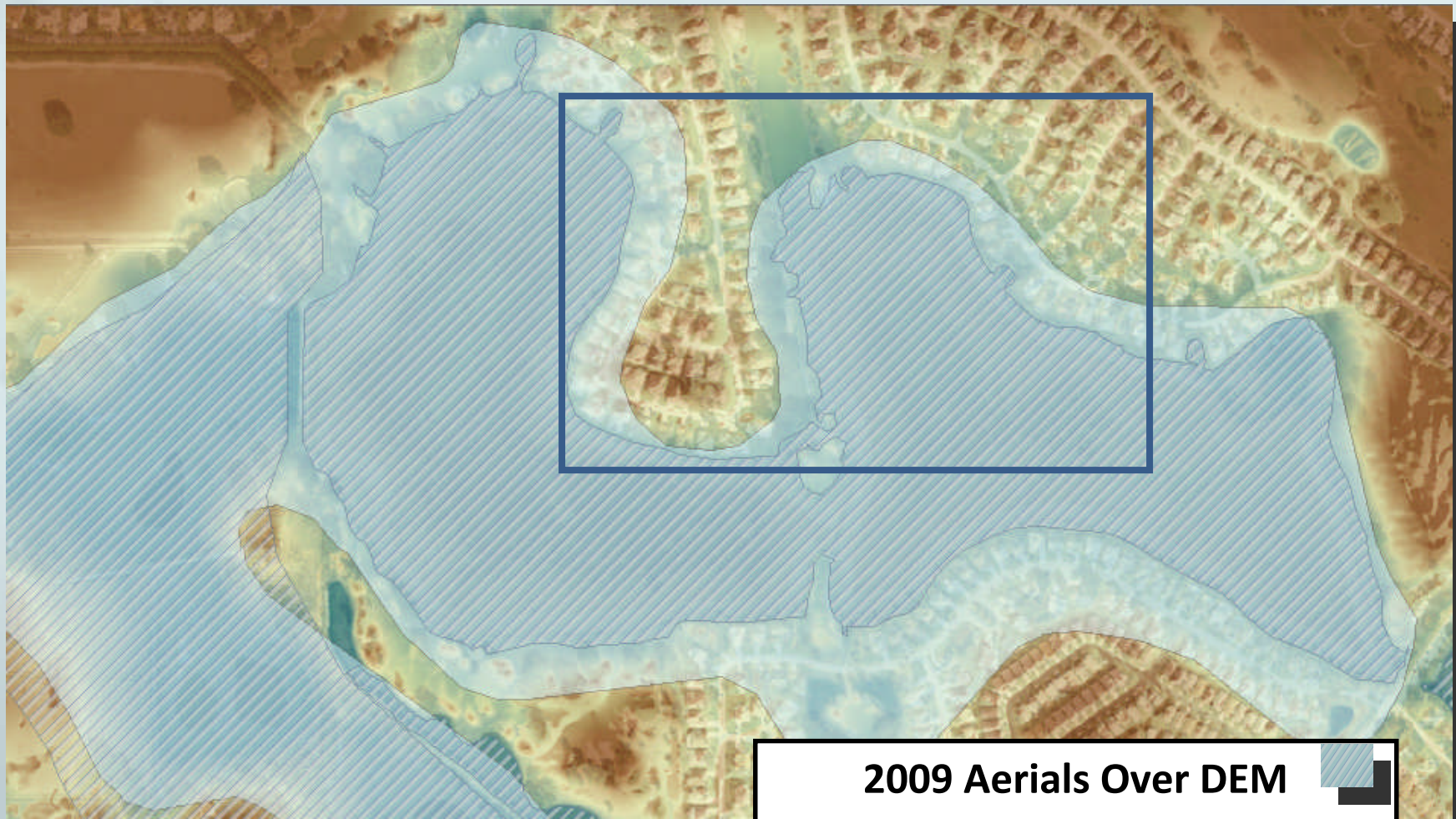
Sample Digital FIRM - Update Overview



**Current Effective Panel and
FEMA Q3 Data and 2009 Aerials**
With New Adjusted SFHA



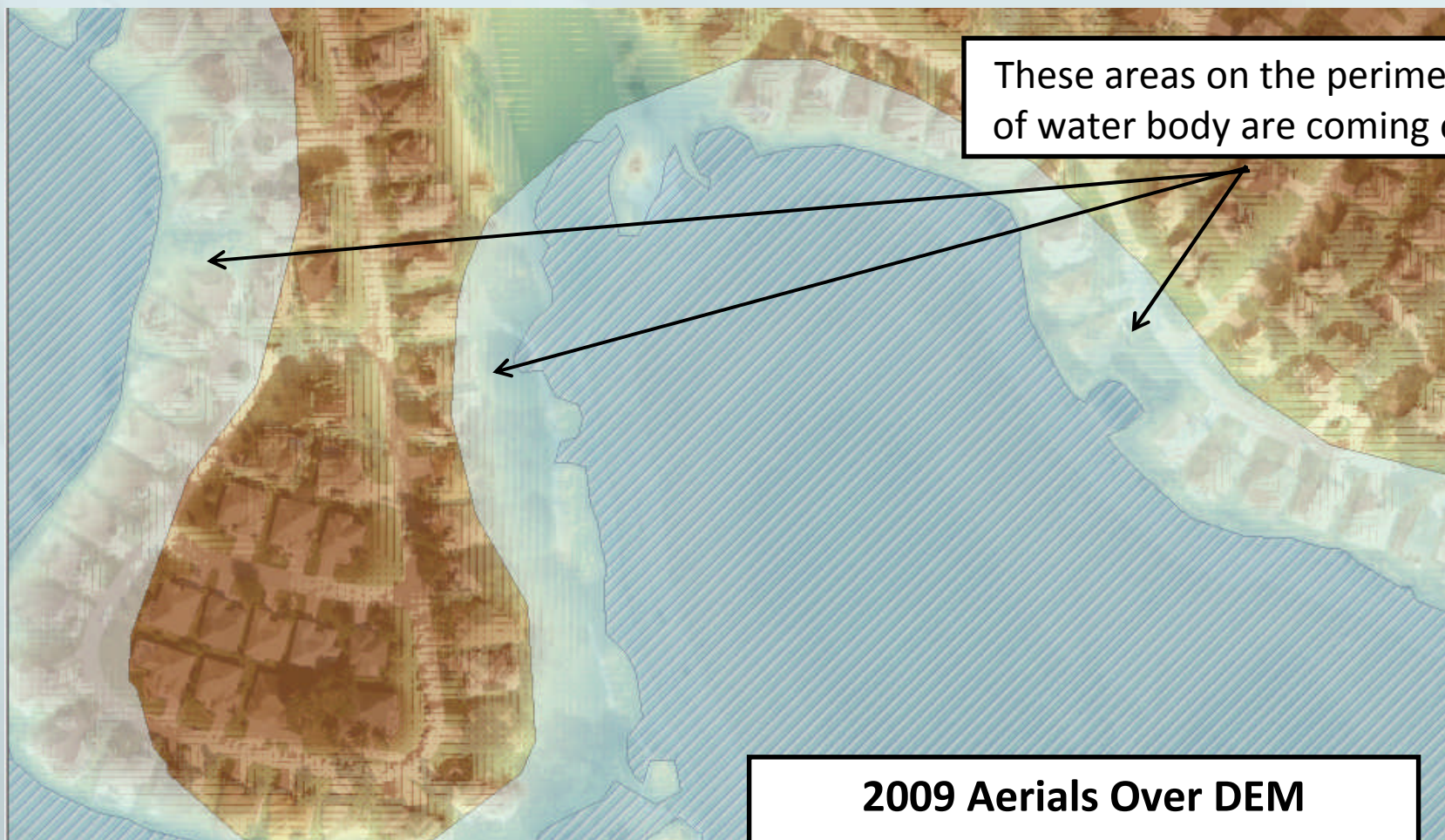
Sample Digital FIRM - Update Overview



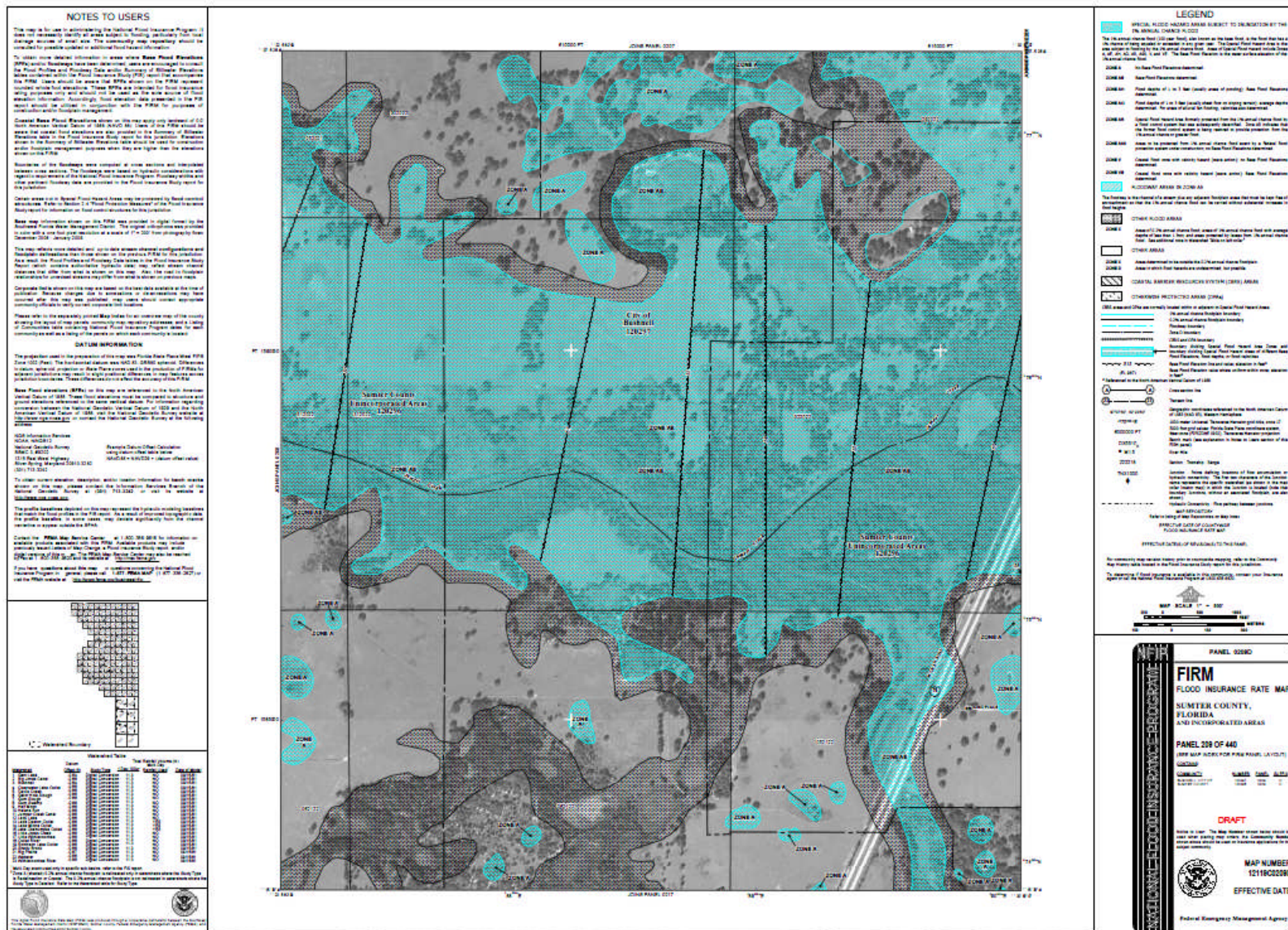
2009 Aerials Over DEM
With New Adjusted SFHA



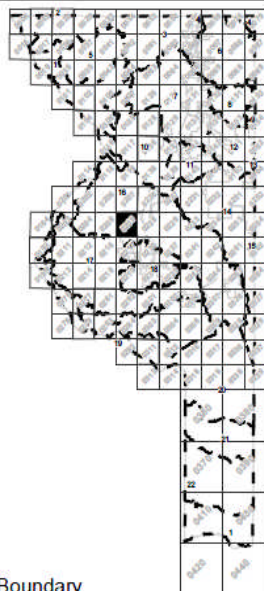
Sample Digital FIRM - Update Overview



Map Modernization Final Products



DFIRM Template / Collar Area



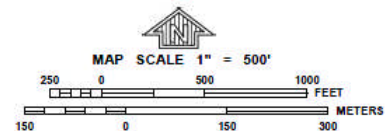
Watershed Boundary

Watershed Table

Watershed	Datum Offset (ft)	Study Type	Total Rainfall Volume (in)		Date of Model
			1 Day 100yr	Multi-Day Rainfall Used [†]	
1. Gant Lake	-0.84	Digital Conversion	11.3	NO	09/15/81
2. Big Jones Canal	-0.86	Digital Conversion	11.3	NO	09/15/81
3. Bushnell	-0.84	Digital Conversion	11.3	NO	09/15/81
4. Clearwater Lake Outlet	-0.86	Digital Conversion	11.3	NO	09/15/81
5. Devils Creek	-0.86	Digital Conversion	11.3	NO	09/15/81
6. Gator Hole Slough	-0.86	Digital Conversion	11.3	NO	09/15/81
7. Gum Slough	-0.86	Digital Conversion	11.3	NO	09/15/81
8. Gum Swamp	-0.86	Digital Conversion	11.3	NO	09/15/81
9. Half Moon	-0.86	Digital Conversion	11.3	NO	09/15/81
10. Helena Run	-0.86	Digital Conversion	11.3	NO	09/15/81
11. Jumper Creek Canal	-0.86	Digital Conversion	11.3	NO	09/15/81
12. Lady Lake	-0.86	Digital Conversion	11.3	NO	09/15/81
13. Lake Deaton Outlet	-0.86	Digital Conversion	11.3	YES	09/15/81
14. Lake Miona Outlet	-0.86	Digital Conversion	11.3	YES	09/15/81
15. Lake Okahumpka Outlet	-0.86	Digital Conversion	11.3	YES	09/15/81
16. Little Jones Creek	-0.86	Digital Conversion	11.3	NO	09/15/81
17. Little Withlacoochee	-0.86	Digital Conversion	11.3	NO	09/15/81
18. Outlet River	-0.86	Digital Conversion	11.3	NO	09/15/81
19. Robinson Lake Outlet	-0.86	Digital Conversion	11.3	NO	09/15/81
20. Shady Brook	-0.86	Digital Conversion	11.3	NO	09/15/81
21. Big Prairie	-0.87	Digital Conversion	11.3	NO	09/15/81
22. Webster	-0.86	Digital Conversion	11.3	NO	09/15/81
23. Withlacoochee River	-0.86	Digital Conversion	11.3	NO	09/15/81

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.



PANEL 0209D

FIRM

FLOOD INSURANCE RATE MAP

SUMTER COUNTY,
FLORIDA
AND INCORPORATED AREAS

PANEL 209 OF 440

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BUSHNELL CITY OF	120297	0209	D
SUMTER COUNTY	120296	0209	D

DRAFT

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on Insurance applications for the subject community.



MAP NUMBER
12119C0209D

EFFECTIVE DATE

Federal Emergency Management Agency

New Paneling Scheme

Bushnell Example

New

11 Panels
(1:500 map scale)

Old

3 Panels
(1:2000 map scale)
Most of the city is
on 1 map panel

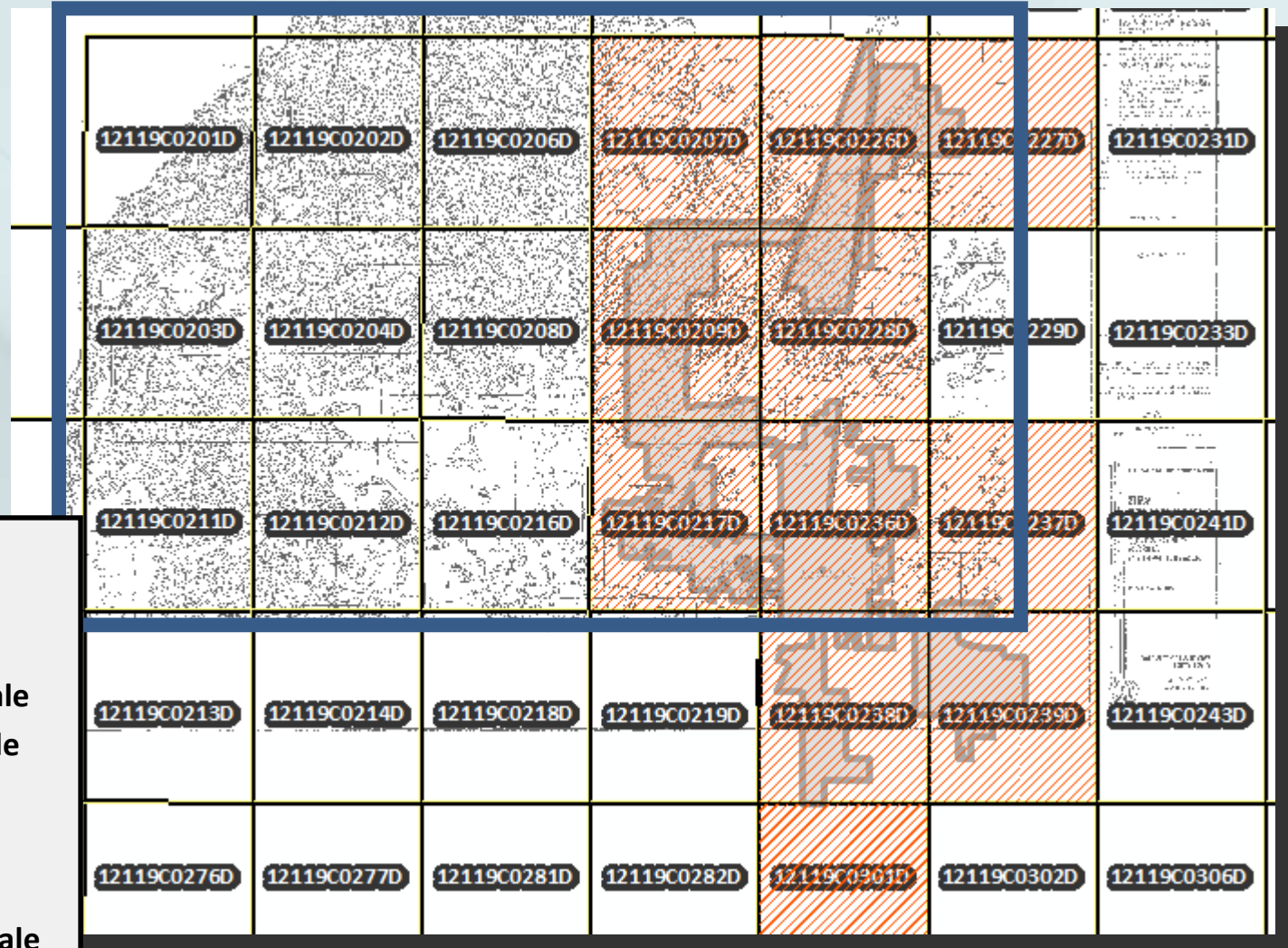
Countywide

New

155 Panels
-147 at a 1:500 map scale
- 8 at a 1:1000 map scale

Old

13 Panels
All 13 at 1:2000 map scale

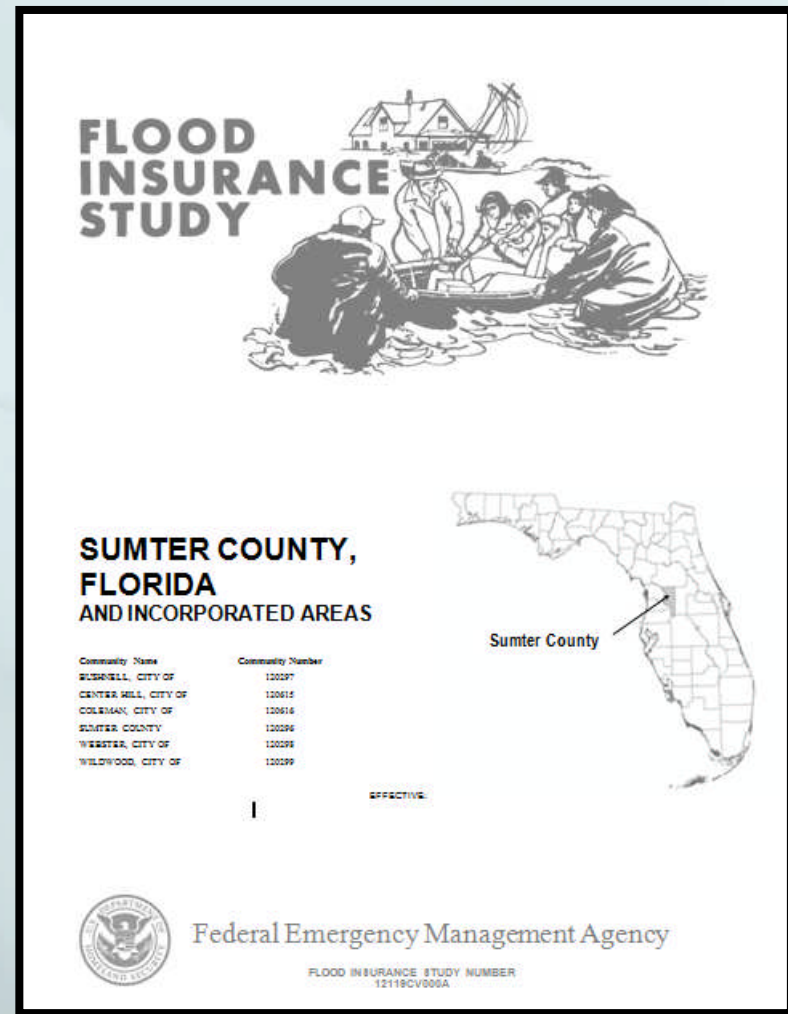
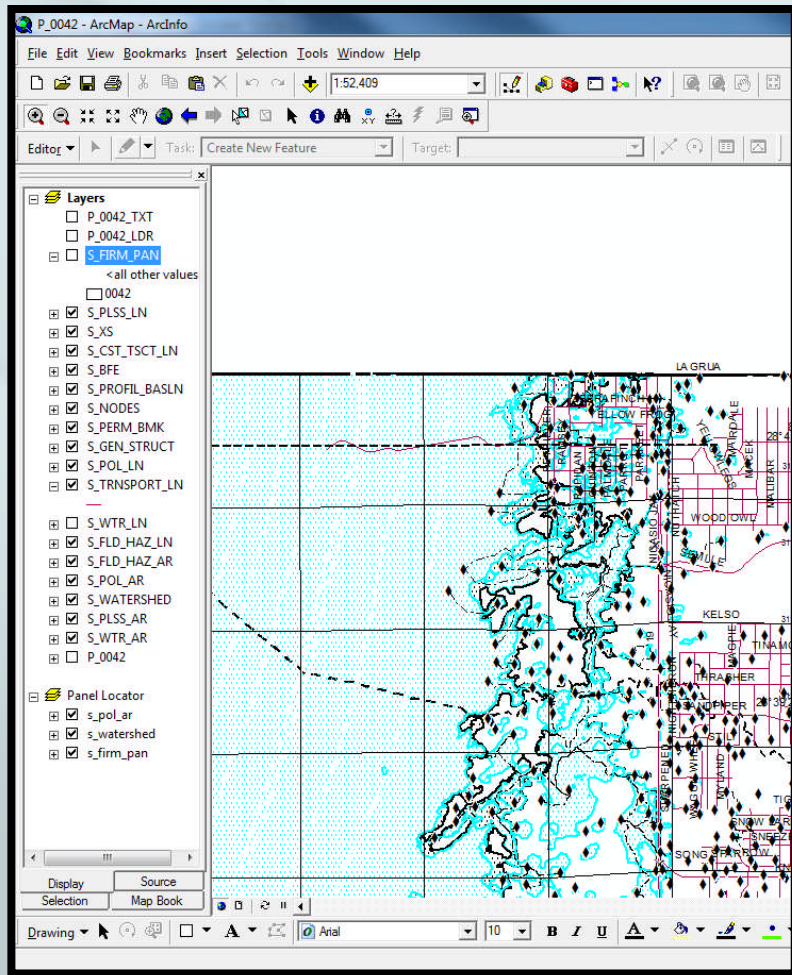


Map Modernization Final Products

Flood Insurance Study

Panels – PDF's and 1 Set of Hard Copy (if requested)

ESRI Map Data (GDB file)



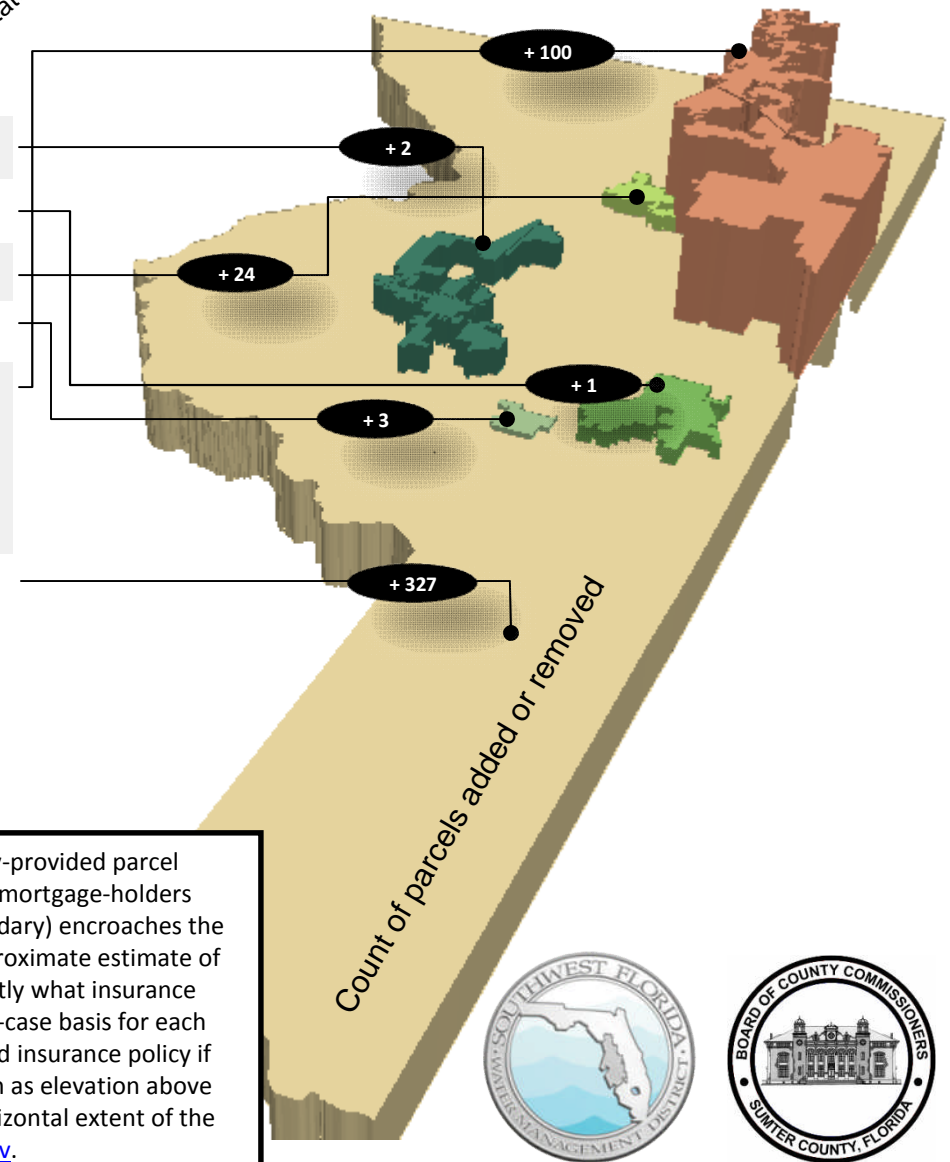
**Magnitude of Changes
(at Parcel Level of Analysis)
And
Remaining Project Timeline**



Impacts of Special Flood Hazard Area Revisions

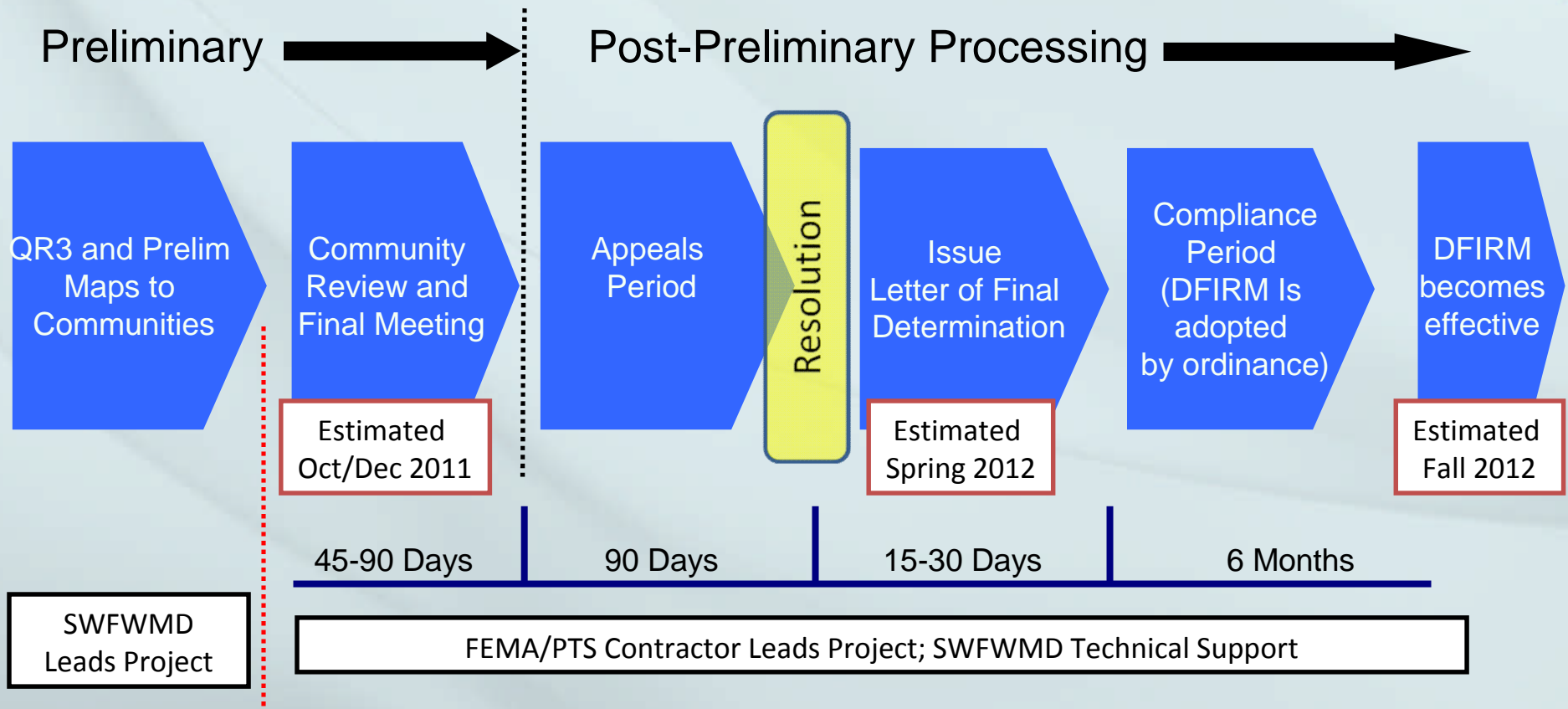
Sumter County, FL.

	Parcels Newly Touching the SFHA	Parcels No Longer Touching the SFHA	Net Change in Parcel Status
Bushnell	14	12	+2
Center Hill	24	23	+1
Coleman	24	0	+24
Webster	7	4	+3
Wildwood	111	11	+100
Non-Villages	108	11	+97
Villages	3	0	+3
Sumter County (Unincorp.)	1,035	708	+327
Non-Villages	960	389	+571
Villages	75	319	-244
Countywide Total	1,215	758	+457



NOTE: The smallest unit of measure available to estimate impacts are County-provided parcel boundaries (NOT structure footprints). Federal lenders are required to have mortgage-holders carry a flood insurance policy if the mapped high-risk (1% annual storm boundary) encroaches the footprint of the "insurable structure". This graphic is intended to give an approximate estimate of the magnitude of impacts for planning purposes but does not represent exactly what insurance requirements will be enforced by a lender as that is determined on a case-by-case basis for each structure by the lending institution. The lending institution can require a flood insurance policy if they deem the risk worthy but rates would vary dependent upon factors such as elevation above determined base flood elevation, whether the structure is in or close the horizontal extent of the flood hazard, year built, etc. More information at <http://www.floodsmart.gov>.

Timeline for the Post-Preliminary Process



Time frames given are approximate, sometimes concurrent, and may vary from study to study



Project Education Activities

ACTIVITY	DATE
Scoping Meeting	December 2010
Stakeholder Advisory Group Meeting #1	March 2011
Work Map Meetings with Communities	August 2011
Stakeholder Advisory Group Meeting #2	August 2011
Preliminary Maps Released to Community Officials for Review	October 2011*
Flood Risk Open House	November 2011*
90-Day Public Comment Period Starts	December 2011*
Letter of Final Determination Issued	Spring 2012*
New FIRMs Become Effective	Fall 2012*

** Date subject to change*



What to Expect from Constituents



Get Ahead of the Confusion to Manage Expectations



- There will be confusion and concern for why there are new maps

New maps = safer community and allows for better implementation of floodplain management

- There will be a desire to see new maps and learn of potential changes to flood insurance

Use outreach tools and stakeholder groups to educate the public about flood risks and new maps



Advertise for open house meeting and utilize websites for viewing maps.

Point people to FEMA websites such as the Map Information Exchange and floodsmart.gov for technical concerns



Get Ahead of the Confusion to Manage Expectations

- Media will want to show examples of extreme changes
 - Be prepared to show examples of items that public will perceive positively and those that will be perceived negatively*
- Public will want to know how they can “get out” of the high-risk area

Be prepared to explain the protest and appeals period that will begin towards the end of 2011

Be prepared to explain insurance requirements (use brochures or work with local agents) and how costs can be reduced

Educate staff (in-reach) on timelines of events as they may need to be prepared for spikes in phone calls, walk-in's, requests for elevation certificates (or other supporting building information). Being responsive during these times will make public and staff's experience with project better



Building, Insurance, and Outreach Overview



Effects of Map Changes on Insurance

1. Properties *move into a high-risk zone* (A or V) from a low- or moderate risk zone (B,C,X) [e.g., Grandfathering]
2. Properties *move into a low- or moderate risk zone* (B, C, X) from a high-risk zone (A or V) [e.g., Conversion – flood risk is reduced, NOT removed]
3. There is a *change in Base Flood Elevation* (BFE)
4. There is a *change in vertical datum*
5. There is *no change*....but are they fully insured?
[Value of remaining loan amount vs. replacement cost]



Preferred Risk vs. Standard

- Preferred Risk Rates
 - Must be in Zone B, C, or X at time of application AND *each subsequent renewal**
 - Fixed premiums; fixed limits
 - Limited loss history
- Standard Rates
 - Rate Tables provided in Flood Insurance Manual
 - Risks not eligible for Preferred Risk Policy
 - Flexible limits

NOTE:

*Effective January 1, 2011:

PRP eligibility is extended *two policy years* after a map change; it then must be rerated using standard rates.



Effects of Map Changes on Insurance

Lower Risk to Higher Risk (or BFE increase): Grandfathering

- Pre-FIRM Buildings – One Chance to lock in the zone
 - Purchase flood insurance before the maps become effective*
- Post-FIRM Buildings – Two Chances to lock in zone or BFE
 - Purchase flood insurance before the maps become effective
 - Obtain proof that the building was built in compliance at the time it was constructed

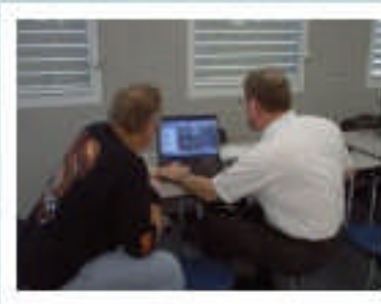
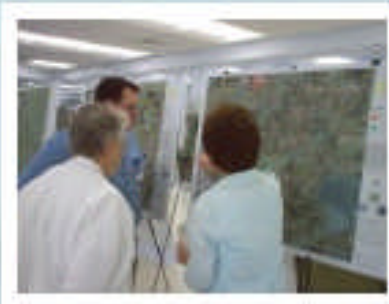
*Remember:
Sometimes the rate
is better when using
the new maps; both
options should be
checked!*

*or for buildings newly mapped into an SFHA, it must be purchased before the end of the 2-year PRP Extension period



Where To Go For More Information

Flood Map Outreach Planning Guidebook for Local Governments



Southwest Florida
Water Management District

 **Dewberry**

 Bender Consulting Services, Inc.



Where To Go For More Information

Resources

- Your community website and contact info
- SWFWMD: <http://www.swfwmd.state.fl.us/>
- FEMA's Mapping Program:
www.fema.gov/plan/ffmm.shtm
- Flood Insurance: www.FloodSmart.gov
- FEMA Map Information eXchange (FMIX):
 - <http://msc.fema.gov>
 - 800-FEMA-MAP (336-2627)
- SWFWMD Outreach Planning Guidebook



What **NOT** to Say

- **You don't live in a flood zone.**
- **You don't need flood insurance.**
- **Grandfathering lets you keep the same rate.**



Discussion / Q&A



QUESTIONS?

